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NOTES AND NEWS

FASCIATION IN REDWOOD.—The Centralized Title Service provided by the Commonwealth Forestry Bureau, Oxford, England, has cited a recent note in Madroño (Becking, R. W., Madroño 20:382-383. 1970) which discussed fasciation in redwood [*Sequoia sempervirens* (D. Don) Endl.]. The card incorrectly states that "only two occurrences (of fasciation) on this species are so far known".

For this reason I want to correct errors promulgated by Becking's note. First, Becking wrote that "fasciation has not yet been reported on coastal redwood". Yet a cursory review of literature shows that this phenomenon was described more than 70 years ago (Peirce, G. J., Proc. Calif. Acad. Sci. 3rd Ser. Bot. 2:85-105. 1901). Second, although not common, fasciation in redwood is not, as Becking called it, "very rare". In 1910, W. L. Jepson (The silva of California. Mem. Univ. Calif. 2, 1910) reported that "fasciation of stump sprouts in redwood has also been observed a number of times". The first time I saw fasciation in redwood was in 1932 at Cazadero, California. Third, the statement that "fasciation is sometimes only of annual duration" is misleading. J. S. Boyce (Forest pathology. New York and London: McGraw-Hill Book Co., Inc. 1938) reported that this kind of "malformation is usually confined to the growth of one season; perennial fasciation is rare".

Furthermore, some of Becking's speculations on the causes of fasciation seem to be without scientific bases. His contention that fasciation "is considered to be genetically controlled by a mutation, which can be propagated vegetatively and which may come true from seed" is not supported by any evidence. His statement should be documented if he has evidence. That fasciation in redwood is caused by "wound stimulation", and specifically by insect attack, is remote. Fasciation in sweet peas is known to be induced by bacteria (Tilford, P. E., Jour. Agr. Res. 383-394. 1936), and in some cases its occurrence in other plants has been attributed to local over-nutrition (Boyce, J. S., Forest pathology. New York and London: McGraw-Hill Book Co., Inc. 1938). Since examples of fasciation have been found on redwood sprouts that are nurtured by well-developed root systems of logged parent trees, over-nutrition seems a likely cause of fasciation in redwood sprouts. However, the causes of most fasciations are unknown. Since only occasional stems are affected, the subject is academic only.—DOUGLASS F. ROY, Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, Berkeley, Calif., stationed at Redding, California 96001.